

Amendments to the Claims:

Please add new claims 95 and 96, and amend claims 86 and 91 as follows.

1-85 (Canceled).

86. (Currently Amended) A two-hybrid screening method for identifying a pair of molecules that interact with a proline-rich nuclear receptor co-regulatory protein (PNRC) molecule via the binding sequence of SEQ ID NO:5, wherein said PNRC molecule binds a liganded nuclear receptor and wherein said pair of molecules consists of a nuclear hormone receptor peptide molecule and a ligand molecule, the method comprising:

- a. providing a cell culture that (1) expresses a bait PNRC fusion molecule which comprises said PNRC molecule and (2) contains a reporter gene, wherein the expression of said reporter gene depends on binding of said bait PNRC fusion molecule to said nuclear hormone receptor peptide molecule;
- b. transfecting said cell culture with an expression library of nucleic acids that encode said nuclear hormone receptor peptide molecules to be screened, to produce a library of cells that express said nuclear hormone receptor peptide molecules to be screened and said bait PNRC;
- c. dividing said cells into first and second portions;
- d. growing said first portion of said cells in the presence of said ligand molecule to be screened;
- e. growing said second portion of said cells in the absence of said ligand molecule to be screened;

- f. comparing the level of expression of said reporter gene in the cells of said first and second portions; and
- g. if cells of said first and second portions express said reporter gene at different levels, identifying said pair of molecules as interacting with PNRC.

87. (Previously presented) A two-hybrid screening method of claim 86 wherein said PNRC molecule is selected from the group consisting of SEQ ID NO:8, SEQ ID NO:9 and a fragment thereof, wherein said PNRC molecule contains said binding sequence of SEQ ID NO:5.

88. (Previously presented) The method of claim 87 wherein said PNRC molecule is SEQ ID NO: 9 or a fragment thereof.

89. (Previously presented) The method of claim 87 wherein said PNRC molecule is SEQ ID NO: 8 or a fragment thereof.

90. (Previously presented) The method of claim 86 wherein said nuclear hormone receptor peptide molecule and said ligand molecule are selected from the sets of (i) estrogen receptor and estradiol, (ii) glucocorticoid receptor and deoxycorticosterone, (iii) androgen receptor and dehydrotestosterone, (iv) progesterone receptor and progesterone, (v) thyroid hormone receptor and T3, (vi) retinoic acid receptor and all-*trans*-retinoic acid, and (vii) 9-*cis*-retinoic acid receptor and 9-*cis*-retinoic acid.

91. (Currently Amended) A two-hybrid screening method for identifying a pair of molecules that interact with a proline-rich

nuclear receptor co-regulatory protein (PNRC) molecule via the binding sequence of SEQ ID NO:5, wherein said PNRC molecule is selected from the group consisting of SEQ ID NO:8, SEQ ID NO:9 and a fragment thereof, wherein said PNRC molecule contains said binding sequence of SEQ ID NO:5, wherein said PNRC molecule binds a liganded nuclear receptor and wherein said pair of molecules consists of a nuclear hormone receptor peptide molecule and a ligand molecule, the method comprising:

- a. providing a cell culture (1) that expresses a bait PNRC fusion molecule which comprises said PNRC molecule and (2) that contains a reporter gene, wherein the expression of said reporter gene depends on binding of said bait PNRC fusion molecule to said nuclear hormone receptor peptide molecule;
- b. transfecting said cell culture with an expression library of nucleic acids that encode said nuclear hormone receptor peptide molecules to be screened, to produce a library of cells that express said nuclear hormone receptor peptide molecules to be screened and said bait PNRC;
- c. dividing said cells into first and second portions;
- d. growing said first portion of said cells in the presence of said ligand molecule to be screened;
- e. growing said second portion of said cells in the absence of said ligand molecule to be screened;
- f. comparing the level of expression of said reporter gene in the cells of said first and second portions; and
- g. if cells of said first and second portions express said reporter gene at different levels, identifying said pair of molecules as interacting with PNRC.

92. (Previously presented) The method of claim 91 wherein said PNRC molecule is SEQ ID NO: 9 or a fragment thereof.

93. (Previously presented) The method of claim 91 wherein said PNRC molecule is SEQ ID NO: 8 or a fragment thereof.

94. (Previously presented) The method of claim 90 wherein said nuclear hormone receptor peptide molecule and said ligand molecule are selected from the sets of (i) estrogen receptor and estradiol, (ii) glucocorticoid receptor and deoxycorticosterone, (iii) androgen receptor and dehydrotestosterone, (iv) progesterone receptor and progesterone, (v) thyroid hormone receptor and T3, (vi) retinoic acid receptor and all-trans-retinoic acid, and (vii) 9-cis-retinoic acid receptor and 9-cis-retinoic acid.

95. (New) A two-hybrid screening method for identifying a pair of molecules that interact with a proline-rich nuclear receptor co-regulatory protein (PNRC) molecule via the binding sequence of SEQ ID NO:5, wherein said PNRC molecule is selected from the group consisting of SEQ ID NO:8 and a fragment thereof, wherein said PNRC molecule contains SEQ ID NO:9, wherein said PNRC molecule binds a liganded nuclear receptor and wherein said pair of molecules consists of a nuclear hormone receptor peptide molecule and a ligand molecule, the method comprising:

- a. providing a cell culture (1) that expresses a bait PNRC fusion molecule which comprises said PNRC molecule and (2) that contains a reporter gene, wherein the expression of said reporter gene depends on binding of

said bait PNRC fusion molecule to said nuclear hormone receptor peptide molecule;

- b. transfecting said cell culture with an expression library of nucleic acids that encode said nuclear hormone receptor peptide molecules to be screened, to produce a library of cells that express said nuclear hormone receptor peptide molecules to be screened and said bait PNRC;
- c. dividing said cells into first and second portions;
- d. growing said first portion of said cells in the presence of said ligand molecule to be screened;
- e. growing said second portion of said cells in the absence of said ligand molecule to be screened;
- f. comparing the level of expression of said reporter gene in the cells of said first and second portions; and
- g. if cells of said first and second portions express said reporter gene at different levels, identifying said pair of molecules as interacting with PNRC.

96. (New) A two-hybrid screening method for identifying a pair of molecules that interact with a proline-rich nuclear receptor co-regulatory protein (PNRC) molecule via the binding sequence of SEQ ID NO:5, wherein said PNRC molecule is SEQ ID NO:8, wherein said PNRC molecule contains SEQ ID NO:9, wherein said PNRC molecule binds a liganded nuclear receptor and wherein said pair of molecules consists of a nuclear hormone receptor peptide molecule and a ligand molecule, the method comprising:

- a. providing a cell culture (1) that expresses a bait PNRC fusion molecule which comprises said PNRC molecule and (2) that contains a reporter gene, wherein the

expression of said reporter gene depends on binding of said bait PNRC fusion molecule to said nuclear hormone receptor peptide molecule;

- b. transfecting said cell culture with an expression library of nucleic acids that encode said nuclear hormone receptor peptide molecules to be screened, to produce a library of cells that express said nuclear hormone receptor peptide molecules to be screened and said bait PNRC;
- c. dividing said cells into first and second portions;
- d. growing said first portion of said cells in the presence of said ligand molecule to be screened;
- e. growing said second portion of said cells in the absence of said ligand molecule to be screened;
- f. comparing the level of expression of said reporter gene in the cells of said first and second portions; and
- g. if cells of said first and second portions express said reporter gene at different levels, identifying said pair of molecules as interacting with PNRC.